

MICROPARTICLES WITH ADSORBENT SURFACES,  
METHODS OF MAKING SAME, AND USES THEREOF

5

Abstract of the Disclosure

Microparticles with adsorbent surfaces, methods of making such microparticles, and uses thereof, are disclosed. The microparticles comprise a polymer, such as a poly( $\alpha$ -hydroxy acid), a polyhydroxy butyric acid, a polycaprolactone, a polyorthoester, a polyanhydride, and the like, and are formed using cationic, anionic, or nonionic detergents.

10

The surface of the microparticles efficiently adsorb biologically active macromolecules, such as DNA, polypeptides, antigens, and adjuvants.